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Applicant notes the Examiner's request to label Figs. 1-3 of the drawings as "Prior Art." Applicant will make these drawing changes upon allowance of the claims.

By this Amendment, Applicant has amended claims 1, 7, 12, 13, 15 and 16. Applicant requests reconsideration of these claims in view of the foregoing amendments and the following remarks.

Overview

As described in the original specification, the motion picture industry over the years has endured the prohibitive time and costs of physically cutting and preparing workprint for big screen preview exhibitions. Despite the time and costs involved, the motion picture industry has continued to use workprint in preview screenings, mainly for its high resolution picture quality. High resolution picture quality is necessary for meaningful feedback to the filmmakers, who must make creative decisions in the final editing. In the past, the idea of projecting video on a big theater-like screen to an audience for preview screening has been routinely rejected because of the low resolution and poor picture quality associated with video. Although workprint was expensive and slow, there was simply no acceptable alternative to its picture quality.

The present invention was the first to address the industry's combined needs for quick editing and high quality preview screenings on large theater-size screens, without the enormous effort and expense associated with workprint. Specifically, Applicant is the first to provide a method in which the workprint is eliminated in this type of preview screening process. The present invention replaces film workprint with electronic equivalents that possess sufficiently high resolution and motion picture quality to project on a big theater-like screen and thereby simulate as close as possible the experience of actual cinema film viewing.

In Applicant's invention, the viewing, evaluating and displaying of the images is done in an environment that most closely simulates the real theater, where the final edited film will be displayed to the public. By providing this environment, Applicant's method enables more meaningful audience feedback, which translates into superior and more creative editing decisions to be made in a way that has never been done before without workprint.

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The invention uses high definition video or other equivalent high definition formats to display dailies and exhibitions to a preview audience. This is all done without workprint and without concluding the post-production process in the electronic form.

Brief Explanation of Amendments

Claim 1 has been amended to more clearly recite the features of Applicant's invention, as described above, and to clarify Applicant's invention over the prior art cited by the Examiner. In particular, "high definition video storage medium" has been replaced by "digital data storage format" to clarify the sequence of the steps in Applicant's method. In addition, "preview screening" has been clarified as one which takes place "on a big theater-like screen that simulates cinema resolution and picture quality." Similar amendments have been made to claims 7, 12, 13, 15 and 16.

Claims 12, 13 and 16 also have been amended to clarify the process of editing visual images stored in a digital data storage format before the actual edit decision list is generated. This process is explained in detail in the specification and does not add new matter.

Response to Examiner's Rejection of Claims 1-7 Based on Frazen and Kajimoto

Claims 1-7 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the Frazen patent in view of the Kajimoto patent. In rejecting these claims, the Examiner states that the Frazen patent teaches the method of "editing a motion picture film by first converting the film to video, editing the video according to an audience preference after viewing the video and finally conforming the cut negative to the final edit decision list." (May 27, 1997 Office Action, p. 2).

The Frazen patent relates to a method for aligning magnetic sound track and 35mm film containing picture frames during an editing process. More specifically, the Frazen patent relates to a method for applying various audio reference codes, associated with the position of picture frames on film, to the "balance stripe" of a single-stripe magnetic sound track through the use of flatbed editing tables. Unlike Applicant's invention which eliminates workprint, the Frazen device uses workprint to achieve a final cut negative.

The use of workprint in the Frazen process is noted throughout the Frazen patent. For example, in column 14, lines 50-57 of the Frazen patent, he states:

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"After an edit decision list is created, video recorder/player 114 may be used to play an edited version of a second videotape or videotape with edited segments of film 12 and associated track 1. After viewing an edited videotape an editor will determine whether an edit decision list is completed. In which case, with a completed edit decision list, actual film 12 and associated track 1 may be edited to conform the previously edited and 'approved' videotape." (emphasis added)

In other words, once the editor has achieved sychronicity between picture and sound, workprint can be edited for further use in the editing process. As noted above, the Frazen patent also discusses "an editor" (emphasis added) viewing videotape and conforming film to the videotape. (Frazen patent, col. 11, lines 66-67; col. 12, lines 8-10; col.14, lines 50-57). The Frazen patent does not disclose or suggest using high definition video in connection with "preview screening on a big theater-like screen" which is necessary to obtain meaningful "audience" feedback in the manner contemplated by Applicant's invention. In this regard, Applicant notes that a single film editor, working at an editing table with the Frazen device to align picture with sound, is not an "audience" for purposes of preview screening and providing feedback in the manner contemplated by Applicant's invention.

Furthermore, the "display device" used to view and edit film images in the Frazen process is a film display, not a video display. Also, these displays are merely small rear projection film viewing monitors on the editing table. (Frazen patent, Figure 5, "display devices" 304 and 309; col. 11, lines 44-50; col. 12, lines 8-10). There is nothing to suggest the use of high definition video (or any other type of video for that matter) on a big theater-like screen with cinema resolution and picture quality for preview screening, as claimed by Applicant. The reason, of course, is that the Frazen process is designed to synchronize picture and sound and thereby yield workprint for editing and viewing purposes.

The Frazen patent fails to recognize or address the combined needs for (1) non-linear electronic editing and (2) quick, inexpensive preview exhibitions with high resolution, electronic images on theater-size screens. This is because the Frazen patent addresses a completely different need -- applying audio reference codes to the balance stripe of a magnetic soundtrack on a flatbed editing table and then linking these codes to Acmade codes on film workprint for editing and/or display purposes. Thus, the use of workprint is central to Frazen's

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process. Applicant's use of high definition video in place of workprint to exhibit movie previews on big theater-like screens that simulate cinema resolution and high picture quality is a concept that is completely different from Frazen's. Thus, Frazen's teachings are wholly unrelated to Applicant's claimed invention.

According to the Office Action, "Frazen states that known video equipment may be used" (May 27, 1997 Office Action, p. 2), apparently implying that Frazen could use high definition video equipment with his process if desired. Such an interpretation is not supported, however, because Frazen does not disclose, and does not need, high resolution or high picture quality to carry out his method of applying reference codes to the soundtrack balance stripe on a flatbed editing table. Since Frazen is concerned with synchronizing picture on film workprint and sound on a separate sound film, he never contemplates the use of high definition video or the use of electronic images on a big theater-like screen for preview screenings to an audience in lieu of workprint. Since Frazen teaches the use of workprint 12 as an integral step in his process, there is no need to use high definition electronic images for big screen projection. Thus, Frazen teaches away from Applicant's invention, which eliminates workprint.

The purpose of Frazen's method is completely foreign to the concept of using audience feedback in preview screenings to generate a final edit decision list without workprint. Indeed, Frazen's method is intended to be carried out by a single editor at a flatbed film editing table using workprint. The use of high definition video on a big screen in the Frazen method makes no sense and only comes to light by using hindsight provided by Applicant's disclosure.

The Examiner also cites the teaching in the Kajimoto patent of "using a nonlinear digital video editing." (May 27, 1997 Office Action, p. 2). However, it is not understood how or why this teaching adds anything new to the flatbed editing process of Frazen (or how this teaching would have rendered Applicant's invention obvious). Frazen already notes that electronic editing may be carried out using existing videotape recording systems, such as VHS, Telecine and Rank-Cintel, in which film and track are copied to videotape and then electronically edited. (Frazen patent, col. 3, lines 26-36). In any event, as stated in Applicant's response to the first Office Action, dated February 5, 1997, Applicant makes no claim to having invented nonlinear video editing equipment. (See also Applicant's original

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specification, page 4, lines 25-26). Rather, Applicant has invented a novel method for replacing workprint in the process of preview screening and subsequent film editing, a concept that is not at all disclosed or suggested by the Frazen or Kajimoto patents, either alone or in combination.

Under the law, the Examiner has the burden under Section 103 to establish a <u>prima facie</u> case of obviousness. <u>In re Fritch</u>, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The Federal Circuit explained the nature of this burden in <u>In re Fine</u>, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988), as follows:

"[The examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references."

Applicant respectfully contends that the Examiner has not met this burden, because neither the Frazen patent nor the Kajimoto patent recognizes or addresses the need for quick, inexpensive preview exhibitions using high definition video on theater-size screens to simulate cinema resolution and picture quality without film workprint. Given the vast differences between the cited patents and Applicant's claims, it is not enough to bridge the gaps by stating that "[t]he evaluation step is an <u>inherent part</u> of the editing method" (emphasis added). The Federal Circuit has held that an Examiner must show more, by pointing to specific teachings in the prior art. <u>In re Zurko</u>, 42 U.S.P.Q.2d 1476, 1479 (Fed. Cir. 1997). ("[t]he Board has not pointed to any teaching of performing [the applicant's claimed method].") The Federal Circuit further stated:

"While in retrospect, looking at applicant's invention, it might seem logical to perform a repeat-back in the UNIX system over a trusted line, neither [prior art] UNIX nor FILTER2 teaches communicating with the user over a trusted pathway." (emphasis added).

Accordingly, the Federal Circuit held that "the Board clearly erred in its finding of inherency from the prior art," and "[i]n so erring, the Board impermissibly used hindsight to arrive at the claimed invention." <u>Id.</u> at 1479.

Similarly, in <u>W.L. Gore & Assocs., Inc. v. Garlock, Inc.</u>, 721 F.2d 1540, 1553 (Fed. Cir. 1983), the Federal Circuit held that:

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"To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher."

In summary, video has been used in conjunction with film editing in various ways. However, this alone does not suggest the use of high definition video for preview screenings on a big theater-like screen to replace workprint in film production and/or post-production in the manner claimed by Applicant.

Response to Examiner's Rejection of Claims 1-16 Based on Bluth and Kajimoto

Claims 1-16 also have been rejected under U.S.C. § 103(a) as being unpatentable over the Bluth patent in view of the Kajimoto patent. According to the Office Action, the Bluth patent discloses a method to "edit a motion picture film by first digitizing it and transferring the film to video." The patent also "teaches changing the format or aspect ratio of the film." (May 27, 1997 Office Action, p. 2).

The Bluth patent relates to a method of <u>producing</u> color motion pictures, initially using analog and then digital video techniques. In other words, the Bluth patent relates to a method of initially shooting movies electronically with video and not with film. Thus, the Bluth process starts with video, not film, which provides lower resolution and quality than film. The video is optionally transferred to film. The lower resolution and quality of the video therefore permeates the entire Bluth process and never could result in the high quality that is achieved when starting with film, as in Applicant's process.

In this regard, Bluth describes a method of using a three-sensor electronic color camera to provide analog video output signals, converting the analog signals to digital signals, recording the digital signals on magnetic tape, reconverting the digital signals to analog, playing back the analog signals and recording the analog signals to "provide work print for editing purposes." (Bluth patent, col. 3, lines 16-25; col. 4, lines 65-70; emphasis added). The Bluth patent does not teach transferring film to video. If anything, it teaches transferring video signals to film. The Bluth patent teaches linear tape editing from an electronic original with the end result to be optionally scanned onto film or retained in electronic form. Accordingly, the Bluth patent actually teaches away from Applicant's invention, which starts with film

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negative and then scans the images off the film negative for digital nonlinear editing. After editing, the film negative is conformed to the final edit decision list as the final step of the editing process, without workprint.

As noted above, the Office Action states that the Bluth patent "teaches changing the format or aspect ratio of film." In this statement, Applicant assumes the Examiner equates changing the "format" of visual images with changing the "aspect ratio" of these images. Although the Examiner is correct in saying the Bluth patent teaches a method of changing aspect ratios, Applicant makes no claim of having invented a method solely for changing aspect ratios. Rather, Applicant has invented a novel method for replacing workprint in the process of exhibiting cinema-quality previews on theater-size screens and subsequent film editing, a concept that is not at all disclosed or suggested by the Bluth or Kajimoto patents, either alone or in combination. Changing the aspect ratio is merely one step in one embodiment of the method disclosed by Applicant's invention. Applicant respectfully notes that only claims 8-11 of Applicant's invention involve changing aspect ratios. Thus, the Examiner's rejection of claims 1-7 and 12-16 cannot be based on the method of changing aspect ratios disclosed by the Bluth patent.

As further grounds for the rejection based on the Bluth patent, the Examiner also has stated that:

"Even with independent film producers more than one individual is involved in editing decisions, therefore, using a previewing screen size to fit the audience would be a

To the extent the Examiner may have intended to equate changing the "format" of the images with changing the storage medium for those images (such as magnetic tape, magnetic disc, film, low definition video, high definition video), Applicant disagrees. The Bluth patent does not teach or suggest a method of "changing the format" (i.e., storage medium as used in Applicant's claims) to high definition video for preview screening on theater-like screens during the process, as claimed by Applicant. Indeed, the only way to interpret the Bluth patent in this manner is through prohibited hindsight, using Applicant's disclosure as a guide through the maze of the prior art. In re Fritch, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992) (holding examiner cannot rely on hindsight and "[i]t is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious.")

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common sense approach. . . . Changing the size of the screen used to preview the video would not be a novel feature." (emphasis added). (May 27, 1997 Office Action, p. 3).

This is an unfair generalization of Applicant's claims that fails to focus on the invention as a whole. Applicant respectfully requests the Examiner to consider all of the steps in Applicant's invention together as a whole. In <u>ACS Hospital Systems</u>, <u>Inc.</u>, 732 F.2d at 1577, 221 U.S.P.Q. at 932-33 (Fed.Cir. 1984), the Federal Circuit held that it is improper to base obviousness on elements selected in isolation from multiple prior art references in the absence of a suggestion in those references to bring these elements together in the combination and relationships claimed by the inventor.

The present invention does not involve merely changing the size of the screen to fit a preview audience. Rather Applicant's invention uses high definition video in place of workprint for preview screenings on theater-like screens to capture the high resolution and picture quality associated with real theater exhibitions that use actual motion picture film. Applicant's invention also allows quick digital nonlinear editing. This eliminates the need for physically cutting and preparing workprint for editing, a timely and expensive process that has been used for several decades and is still being used by the film industry today. None of this is disclosed or suggested anywhere in the Bluth patent. Thus, Applicant respectfully disagrees with the Examiner's postulated modifications to the Bluth patent by using a so-called "common sense approach."

In this regard, the Federal Circuit held that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780, 1783-84. The Bluth and Kajimoto patents, alone or in combination, fail to disclose or suggest using high definition video in place of workprint for preview screening on a theater-like screen that simulates cinema resolution and picture quality.

Furthermore, it cannot be established that the differences between Applicant's claimed invention and the devices described in the Bluth and Kajimoto patents would have been obvious to a person of ordinary skill in the art merely because some of the individual limitations in Applicant's claims allegedly can be found in the references. In fact, some of the

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limitations of Applicant's claims cannot even be found in the cited references, so the Examiner has filled these gaps by what he contends would be a "common sense approach." There is no suggestion to combine these limitations in such a way to make out a <u>prima facie</u> case of obviousness of Applicants' claims. The only way in which the cited references can be combined is by using Applicants' disclosure as a blueprint to reconstruct the claimed inventions out of isolated teachings, <u>and in some cases teachings that are totally non-existent</u>, in the cited references. However, this type of hindsight analysis is strictly prohibited. <u>Grain Processing Corp. v American Maize-Products Co.</u>, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988).

The Examiner must do more than simply state that certain modifications to the prior art would be a "common sense approach," or that other steps of the claimed method, which are not disclosed in the cited art, are "commonly practiced in the art." In re Zurko, 42 U.S.P.Q.2d 1476, 1479 (holding Board cannot use "hindsight to arrive at [applicant's] claimed invention"), W.L.Gore & Assocs., 721 F.2d 1540, 1553 (holding "hindsight" cannot be used in evaluating application). The use of phrases such as "a practice common in the art" by examiners has been the subject of comment by the Federal Circuit. In In re Deminski, 796 F.2d 426, 443, 230 U.S.P.Q. 313, 316 (Fed. Cir. 1986), the Federal Circuit noted that rejections based on "common practice" are often a disguise for hindsight analysis:

"There was no suggestion in the prior art to provide Deminski with the motivation to design the valve assembly so that it would be removable as a unit. The board argues that if Pocock had followed the 'common practice' of attaching the valve stem to the valve structure, then the valve assembly would be removable as a unit. The only way the board could have arrived at its conclusion was through hindsight analysis by reading into the art Deminski's own teachings. Hindsight analysis is clearly improper, since the statutory test is whether 'the subject matter as a whole would have been obvious at the time the invention was made.'" (emphasis added; footnote omitted).

Similarly, the Examiner in the present case has failed to show why his proposed modifications to the Bluth and Kajimoto patents would be a "common sense approach." According, the rejections cannot be sustained.

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Response to Examiner's Rejection of Claims 8-16 Based on Frazen, Kajimoto and Bluth or Washino

The Examiner has also rejected claims 8-16 based on the Frazen and Kajimoto patents in combination with the Bluth or Washino patents. In this rejection, the Examiner focusses on prior art that discloses changing aspect ratios. Applicant respectfully notes that only claims 8-11 of Applicant's invention involve changing aspect ratios. Accordingly, Applicant understands that this rejection is directed only to claims 8-11 and not claims 8-16.

In any event, as stated above, Applicant makes no claim of having invented a method solely for changing aspect ratios. Rather, Applicant has invented a novel method for replacing workprint in the process of exhibiting cinema-quality previews with high definition video on theater-size screens and subsequent film editing, a concept that is not at all disclosed or suggested by the Frazen, Kajimoto, Bluth or Washino patents, either alone or in combination. Again, changing the aspect ratio is merely one step in the method disclosed by one embodiment of Applicant's invention.

Also, with respect to the Washino patent, Applicant notes that this patent relates to video, not film, production and post-production. It is based on the use of low quality, inexpensive equipment for higher quality purposes, a dubious proposition at best. If visual images having high quality and density are not recorded initially, they cannot be presented later. Thus, the Washino patent does not disclose, teach or suggest Applicant's invention.

CONCLUSION

Film studios are constantly striving to reduce costs wherever possible. In an industry dominated by nonlinear film editing, one would think that film studios would be desperate to eliminate workprint in connection with dailies and preview screening. Yet, despite all of the problems associated with workprint, and the clear motivation and long felt need that has existed for many years to solve those problems, no one has thought of a way to do so until Applicant's invention.

In view of the foregoing, all claims of the application should now be in condition for allowance, and a Notice of Allowance at an early date is requested. If the Examiner has any

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comments or suggestions regarding the claims, he is invited to telephone Applicants' attorney of record so that extended prosecution of the application can be avoided.

Respectfully submitted,

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